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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/990,415A

DATE: 04/12/2002 P5

TIME: 14:54:27

Input Set : A:\EP.txt

Output Set: N:\CRF3\04122002\I990415A.raw

- 3 <110> APPLICANT: Pharmacia AB
 W--> 4 <120> TITLE OF INVENTION: Protein Cluster I
 W--> 5 <130> FILE REFERENCE: 00349
 W--> 6 <140> CURRENT APPLICATION NUMBER: US/09/990,415A
 7 <141> CURRENT FILING DATE: 2001-11-21
 W--> 8 <160> NUMBER OF SEQ ID: 8
- 9 <170> SOFTWARE: PatentIn version 3.0

 W--> 10 <210> SEQ ID NO: 1

 11 <211> LENGTH: 1232

 12 <212> TYPE: DNA

 13 <213> ORGANISM: human

 15 <220> FEATURE:
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	22	acco	ccagt	ttc 1	tggt1	tctga	ac go	cccta	agcto	att	tccg	caaa	ttta	aggg	ctt	gggto	ctggct	120
	24	tgtt	ccc	ctc	cggct	tcgaa	ac ca	acct	cttct	ct	gagco	cgag	ccag	gcta	ccg (gggct	tcctgg	180
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	30	ccc	cgtgo	ccc a	accg	ggtgg	gg c	gegge	ccggg	g aag	gctc	ctgc	ccct	tccc	tgc 1	tggto	eggegt	360
	32	cac	gcgt	gac q	gtcc	egegt	ig at	tggct	tggga	ı ggç	gece	ggcg	gcga	acago	egg a	aggca	agagag	420
•	34	gaag	ggcgg	gtt (ctgag	gagct	it ca	agaga	agcg	_	_	_		_		_	The state of the s	473
	35									Met	Glu	Ser	Lys	Met	Gly	Glu	Leu	
	36									1				5				
				_					gaa							_	_	521
		Pro		Asp	Ile	Asn	Ile		Glu	Pro	Arg	Trp	_	Gln	Ser	Thr	Phe	
	40		10					15					20					=
		_		_	_				ttc									569
			Gly	Arg	Ala	Arg		Phe	Phe	Thr	Val		Asp	Pro	Arg	Asn		
		25					30		•			35					40	617
		_	_			_	_	_	gaa	_						_		617
		Leu	Leu	Ser	GLY		GIn	Leu	Glu	Ala		Arg	Asn	тте	vaı		Asn	
	48	.				45	_1_				50					55	.	665
				_					cca									665
		Tyr	Arg	Ата	-	vaı	vaı	Thr	Pro	_	TTE	Thr	GIU	Asp		ьeu	Trp	
	52				60				.	65	+ +-	+		~~~	70	~~~	~~~	712
			_						tcc									713
		Arg	Ата		TYL	vaı	TAT	ASP	Ser	Ala	PHE	птэ	PIO		TIII	СТУ	GIU	
	56 58	224	ata	75 ata	ata	2++	ααα	000	80 ata	tas	acc	a a a	ata	85	at a	220	ato	761
									atg Met									,01
-	ノフ	пХЭ	Aat	val	neu	TIG	ату	α r α	IJ C	PET	ATa	GTII	val	ETO	IJC C	UDII	TIC C	

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RAW SEQUENCE LISTING

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DATE: 04/12/2002

TIME: 14:54:27

Input Set : A:\EP.txt

Output Set: N:\CRF3\04122002\I990415A.raw

	63	_			ggc Gly													809
			ttc	taa	cag	taa		aat	сал	tcc	ttc		acc	att	att	aac		857
					Gln										-			037
		tcc	aac	cqc	agt		qac	act.	ccc	atc		ata	agg	caq	cta		aca	905
				_	Ser 140		_					_		_				2 0 -
	74	gcc	tat	gtg	agt	gcc	acc	act	gga	gct	gtg	gcc	acg	gcc	ctg	gga	ctc	953
					Ser					_		_	_	-	_			
	78	aaa	tcc	ctc	acc	aag	cac	ctg	ccc	ccc	ttg	gtc	ggc	aga	ttt	gtg	ccc	1001
	79 80	Lys	Ser 170	Leu	Thr	Lys	His	Leu 175	Pro	Pro	Leu	Val	Gly 180	Arg	Phe	Val	Pro	
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		Phe 185	Ala	Ala	Val	Ala	Ala 190	Ala	Asn	Cys	Ile	Asn 195	Ile	Pro	Leu	Met	Arg 200	
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	87 88	Gln	Arg	Glu	Leu	Gln 205	Val	Gly	Ile	Pro	Val 210	Ala	Asp	Glu	Ala	Gly 215	Gln	
					tac	_			_	_	_	_				_		1145
		Arg	Leu	Gly	Tyr	Ser	Val	Thr	Ala	Ala	Lys	Gln	Gly	Ile	Phe	Gln	Val	
	92				220			_		225			_		230			
					aga													1193
	96			235	Arg				240					245	He	Pro	Pro	
					gac		_		_		_		_	_				1232
					Asp	Thr	Leu		_	Lys	Asp	Phe		_				
	100		250		D NO			255	1				260					
					H: 2													
					PRT													
					ISM:		an											
•	107	<40	0 > S	EQUE	NCE:	2												
	108 109		Glu	Ser	Lys	Met 5	Gly	Glu	Leu	Pro	Leu 10	Asp	Ile	Asn	Ile	Gln 15	Glu	
	111	Pro	Arg	Trp	Asp	Gln	Ser	Thr	Phe	Leu	Gly	Arg	Ala	Arg	His	Phe	Phe	
	112 114		Val	Thr	20 Asp	Pro	Arq	Asn	Leu	25 Leu	Leu	Ser	Gly	Ala	30 Gln	Leu	Glu	
	115			35	-		_		40				- 4	45				
	117 118		Ser 50	Arg	Asn	Ile	Val	Gln 55	Asn	Tyr	Arg	Ala	Gly 60	Val	Val	Thr	Pro	
		-	Ile	Thr	Glu	Asp	Gln	Leu	Trp	Arg	Ala	Lys	Tyr	Val	Tyr	Asp	Ser	
		65		•	_		70					75		_	_		80	
			Phe	His	Pro		Thr	Gly	Glu	Lys		Val	Leu	Ile	Gly	_	Met	
	124		λΊ~	C1 ~	17 = 1	85 Bro	M^+	λ ~~	M^+	ահ∽	90	mh~	C1	0	Mot	95	mk	
	127		HIG	GTII	100		MEL	ASII	MEC	105		1111	ату	cys	110		Thr	

W-->

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/990,415A

DATE: 04/12/2002
TIME: 14:54:27

Input Set : A:\EP.txt

Output Set: N:\CRF3\04122002\I990415A.raw

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129 Phe Tyr Arg Lys Thr Pro Thr Val Val Phe Trp Gln Trp Val Asn Gln
     130
                  115
                                       120
                                                           125
     132 Ser Phe Asn Ala Ile Val Asn Tyr Ser Asn Arg Ser Gly Asp Thr Pro
     133
              130
                                  135
                                                       140
     135 Ile Thr Val Arg Gln Leu Gly Thr Ala Tyr Val Ser Ala Thr Thr Gly
     136 145
                              150
                                                   155
     138 Ala Val Ala Thr Ala Leu Gly Leu Lys Ser Leu Thr Lys His Leu Pro
     139
                          165
                                               170
     141 Pro Leu Val Gly Arg Phe Val Pro Phe Ala Ala Val Ala Ala Asn
     142
                      180
                                          185
                                                               190
     144 Cys Ile Asn Ile Pro Leu Met Arg Gln Arg Glu Leu Gln Val Gly Ile
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                                      200
                                                           205
     147 Pro Val Ala Asp Glu Ala Gly Gln Arg Leu Gly Tyr Ser Val Thr Ala
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     148
                                  215
     150 Ala Lys Gln Gly Ile Phe Gln Val Val Ile Ser Arg Ile Cys Met Ala
     151 225
                              230
                                                   235
                                                                       240
     153 Ile Pro Ala Met Ala Ile Pro Pro Leu Ile Met Asp Thr Leu Glu Lys
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     156 Lys Asp Phe Leu Lys
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     166 <222> LOCATION: (450)..(680)
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     170 accccagttc tggttctgac gccctagctc attccgcaaa tttagggctt gggtctggct
                                                                                120
     172 tgttcccctc cggctcgaac cacctcttct ctgagccgag ccagctaccg gggctcctgg
                                                                                180
     174 aattgccacc cctccctggg cacccttgag gcctccgtgg agggacgtca cggggcagag
                                                                                240
     176 cgggacgtga gcctgagttt gctgcaggcg tgctctgtgt ggtggctggg ttctgccaat
                                                                                300
     178 ccccgtgccc accgggtggg cgcggccggg aagctcctgc ccctccctgc tggtcggcgt
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     180 cacgcgtgac gtcccgcgtg atggctggga gggcccggcg gcgacagcgg aggcagagag
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     182 gaaggeggtt etgagagett eagagageg atg gaa age aaa atg ggt gaa ttg
                                                                                473
    183
                                          Met Glu Ser Lys Met Gly Glu Leu
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    186 cct tta gac atc aac atc cag gaa cct cgc tgg gac caa agt act ttc
                                                                                521
    187 Pro Leu Asp Ile Asn Ile Gln Glu Pro Arg Trp Asp Gln Ser Thr Phe
     188
             10
                                 15
                                                      20
    190 ctg ggc aga gcc cgg cac ttt ttc act gtt act gat cct cga aat ctg
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    191 Leu Gly Arg Ala Arg His Phe Phe Thr Val Thr Asp Pro Arg Asn Leu
    192 25
                             30
                                                  35
                                                                      40
    194 ctg ctg tcc ggg gca cag ctg gaa gct tct cgg aac atc gtg cag aac
                                                                               617
    195 Leu Leu Ser Gly Ala Gln Leu Glu Ala Ser Arg Asn Ile Val Gln Asn
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                         45
                                              50
                                                                  55
    198 tac agg aag acc cca acc gtg gtg ttc tgg cag tgg gtg aat cag tcc
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    199 Tyr Arg Lys Thr Pro Thr Val Val Phe Trp Gln Trp Val Asn Gln Ser
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DATE: 04/12/2002

TIME: 14:54:27

Input Set : A:\EP.txt Output Set: N:\CRF3\04122002\1990415A.raw 200 60 65 70 202 ttc aat gcc att gtt aactactcca accgcagtgg tgacactccc atcactgtga 720 203 Phe Asn Ala Ile Val 204 75 206 ggcagctggg gacagcctat gtgagtgcca ccactggagc tgtggccacg gccctgggac 780 208 tcaaatccct caccaagcac ctgccccct tggtcggcag atttgtgccc tttgcagcag 840 210 tggcagctgc caactgcatc aacatccccc tgatgaggca gagagagctg caggtgggca 900 212 tcccggtggc tgatgaggca ggtcagaggc ttggctactc ggtgactgca gccaagcagg 960 214 gaatetteea ggtggtgatt teaagaatet geatggegat teetgeeatg geeateeeac 1020 216 cactgatcat ggacactctg gagaagaaag acttcctgaa g 1061 219 <210> SEQ ID NO: 4 220 <211> LENGTH: 77 221 <212> TYPE: PRT 222 <213> ORGANISM: human W--> 223 <400> SEQUENCE: 4 224 Met Glu Ser Lys Met Gly Glu Leu Pro Leu Asp Ile Asn Ile Gln Glu 225 1 5 10 15 227 Pro Arg Trp Asp Gln Ser Thr Phe Leu Gly Arg Ala Arg His Phe Phe 228 20 25 30 230 Thr Val Thr Asp Pro Arg Asn Leu Leu Leu Ser Gly Ala Gln Leu Glu 231 35 40 233 Ala Ser Arg Asn Ile Val Gln Asn Tyr Arg Lys Thr Pro Thr Val Val 234 50 55 236 Phe Trp Gln Trp Val Asn Gln Ser Phe Asn Ala Ile Val 237 65 70 75 240 <210> SEQ ID NO: 5 241 <211> LENGTH: 1567 242 <212> TYPE: DNA 243 <213> ORGANISM: human W--> 244 <220> FEATURE: 245 <221> NAME/KEY: CDS 246 <222> LOCATION: (47)..(1015) W--> 247 <400> SEQUENCE: 5 248 gggcatttgt cccgggacca ggtccacagt tttatgtgtg agcaag atg gag gct 55 249 Met Glu Ala 250 252 gac ctg tct ggc ttt aac atc gat gcc ccc cgt tgg gac cag cgc acc 103 253 Asp Leu Ser Gly Phe Asn Ile Asp Ala Pro Arg Trp Asp Gln Arg Thr 254 10 15 256 ttc ctg ggg aga gtg aag cac ttc cta aac atc acg gac ccc cgc act 151 257 Phe Leu Gly Arg Val Lys His Phe Leu Asn Ile Thr Asp Pro Arg Thr 258 20 25 30 35 260 gtc ttt gta tct gag cgg gag ctg gac tgg gcc aag gtg atg gtg gag 199 261 Val Phe Val Ser Glu Arg Glu Leu Asp Trp Ala Lys Val Met Val Glu 262 40 50 264 aag agc agg atg ggg gtt gtg ccc cca ggc acc caa gtg gag cag ctg 247 265 Lys Ser Arg Met Gly Val Val Pro Pro Gly Thr Gln Val Glu Gln Leu 266 55 60 65 268 ctg tat gcc aag aag ctg tat gac tcg gcc ttc cac ccc gac act ggg 295

RAW SEQUENCE LISTING

US/09/990,415A

PATENT APPLICATION:

RAW SEQUENCE LISTING DATE: 04/12/2002 PATENT APPLICATION: US/09/990,415A TIME: 14:54:27

Input Set : A:\EP.txt

Output Set: N:\CRF3\04122002\I990415A.raw

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	gag	aaσ		aat	atc	atc	aaa		atσ	tet	ttc	саσ		cct	aac	aac	343
	Glu	_	_		_			_	_			_			,		313
274		85			, =====		90	5				95	204			O ₁	
	atg		atc	acq	aac	ttc		ctc	caσ	ttc	tac		acσ	at.g	cca	aca	391
	Met						-		_				_	_	_		0,72
	100					105			•		110	9				115	
280	gtg	atc	ttc	tgg	caq	tgg	qtq	aac	caq	tcc	ttc	aat	qcc	tta	atc		439
	Val												-		_		
282				-	120	•				125					130		
284	tac	acc	aac	agg	aat	gcg	gct	tcc	ccc	aca	tca	qtc	aqq	caq	atg	qcc	487
	Tyr			_			_					_		_	_	_	
286				135					140				_	145			
288	ctt	tcc	tac	ttc	aca	gcc	aca	acc	act	gct	gtg	gcc	acg	gct	gtg	ggc	535
	Leu												_	_			
290			150					155					160			•	
292	atg	aac	atg	ttg	aca	aag	aaa	gcg	ccg	ccc	ttg	gtg	ggc	cgc	tgg	gtg	583
	Met													_			
294		165					170	•				175	_	_	_		
296	CCC	ttt	gcc	gct	gtg	gct	gcg	gct	aac	tgt	gtc	aat	atc	ccc	atg	atg	631
297	Pro	Phe	Ala	Ala	Val	Ala	Ala	Ala	Asn	Cys	Val	Asn	Ile	Pro	Met	Met	
298	180					185					190					195	
300	cga	cag	agg	gag	ctc	ata	aag	gga	atc	tgc	gtg	aag	gac	agg	aat	gaa	679
301	Arg	Gln	Arg	Glu	Leu	Ile	Lys	Gly	Ile	Cys	Val	Lys	Asp	Arg	Asn	Glu	
302					200					205					210		
304	aat	gag	att	ggt	cat	tcc	cgg	aga	gct	gcg	gcc	ata	ggc	atc	acc	caa	727
	Asn	Glu	Ile	Gly	His	Ser	Arg	Arg	Ala	Ala	Ala	Ile	Gly	Ile	Thr	Gln	
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	gta												_		_	-	775
	Val	Val		Ser	Arg	Ile	Thr		Ser	Ala	Pro	Gly		Ile	Leu	Leu	
310			230					235					240				
	cca												_	_		_	823
	Pro		IIe	Met	GLu	Arg		Glu	Lys	Leu	His		Met	Gln	Lys	Val	
314		245					250					255					
	aag											-		_			871
	Lys	vaı	Leu	His	Ala		Leu	Gln	Val	Met		Ser	Gly	Cys	Phe		
	260					265					270					275	
	atc												_		_	-	919
	Ile	Pne	мет	val		vaı	Ala	Cys	GLY		Pne	Pro	GIn	Lys	_	GLu	
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	ttg																967
326	Leu	PIO	Val		тАт	ьeu	GIU			ьeu	GTII	Asp	THE		гàг	Ala	
	227	+=+	~~~	295	a++	a > ~	00±		300	+	++~	22+	222	305	a+ -	+	1015
	aag															Ldd	1015
330	Lys	тАт	310	GIU	пеп	ътu			val	тĂĻ	rne	ASII	_	дТΆ	ьeи		
													1075				
												_			_	_	1075 1135
J J =	34 tgcacacttg tgtcctcctt cccctttgcc aacaaggcct gaaggccagg gtagattggg										LLYYY	TTOD					



Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa. VERIFICATION SUMMARY

DATE: 04/12/2002 PATENT APPLICATION: US/09/990,415A TIME: 14:54:28

Input Set : A:\EP.txt

Output Set: N:\CRF3\04122002\I990415A.raw

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